## PHOTOCATALYTIC HYDROPHILIC MEMBER, ITS PRODUCTION AND PHOTOCATALYTIC HYDROPHILIC COATING COMPOSITION

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## **Abstract**

PROBLEM TO BE SOLVED: To obtain a photocatalytic hydrophilic member capable of maintaining high hydrophilic property of the surface over a long period of time and maintaining hydrophilic property even at the time of shielding light by forming a surface layer contg. photocatalytic titanium dioxide and a specified multiple oxide on the surface of a substrate.

SOLUTION: This photocatalytic hydrophilic member has a surface layer contg. photocatalytic titanium dioxide and W-Ti multiple oxide on the surface of the substrate. It is produced by coating the surface of a substrate such as a glazed tile with a liq. contg. photocatalytic titanium dioxide particles such as an ammonia deflocculated anatase type titanium dioxide sol and tungstic acid such as tungstic acid dissolved in an ammonia soln, and carrying out firing at 500-800 deg.C at which W-Ti multiple oxide is formed. This member has high hydrophilic property of the surface, the contamination of the surface is prevented and self-cleaning and easy cleaning are attained.

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